

Time	Topic			
10:00-10:15	elcome Dr. Ildikó Terebesi – INVITE GmbH, Managing Director			
10:15-11:15		te Improving health span in space and on Earth - research at the interface of human beings and technology Prof. Dr. med. Jens Jordan – Director Institute for Aerospace Medicine, German Aerospace Center (DLR)		
11:15-11:30	Break			
11:30-12:30	<ul> <li>Drug delivery – chair Dr. Werner Hoheisel</li> <li>Oral &amp; parenteral dosage forms: how mature technologies keep evolving.</li> <li>Merck's way to Continuous Development and Manufacturing         <ul> <li>Dr. Carsten Schmidt - Head of Drug Product Development, Merck Healthcare KGaA</li> </ul> </li> <li>Spray-drying RNA nanoparticles for inhalation, enhanced storage stability and improved transport conditions         <ul> <li>Prof. Dr. Olivia Merkel – Ludwig-Maximilians-University Munich</li> </ul> </li> </ul>	<ul> <li>Smart Automation – chair Dr. Charly Coulon         Hotspots of modern robotics in laboratory         and production.     </li> <li>Concrete examples of modern robotics         applications from multiple companies.         <ul> <li>Antje Schmelzer – Head of Center of</li></ul></li></ul>	<ul> <li>Collaboration – chair Dr. Tom Maes</li> <li>Working in Consortia – when is it worthwhile, how does it work?</li> <li>How complex regulatory challenges benefit from collaboration in public-private partnership consortia         Dr. Jan Woelz, Head of Ecotoxicology, Pharmaceutical Division, Bayer AG     </li> <li>Enabling Synergies between Academia and Industry – the perspective of an academic. Prof. Dr. Ing. Gerhard Schembecker – TU Dortmund</li> </ul>	
	<ul> <li>Excipients and Manufacturing Considerations for the Growth of mRNA and Gene Therapies Alexander Bernhardt – Head of Drug Delivery &amp; Applications, Health Care, Evonik</li> </ul>			

13:30-14:30

Drug delivery – chair Dr. Werner Hoheisel
Solubilization & bioavailability
enhancement: addressing key challenges

- Nature's elevator for poorly water soluble drugs
   Prof. Dr. Dr. Lorenz Meinel – Julius-Maximilians University Würzburg
- Strategy to tackle poorly soluble compounds including the evaluation of SMEDDS Dr. Kerstin Schäfer – Head Early Development – Boehringer Ingelheim Pharma GmbH & Co. KG

Smart Automation – chair Dr. Charly Coulon Master Class Robotics Assessments: Find your biggest opportunities

## **Interactive Session**

Test our approach to identify the most attractive opportunities for automation within your factories and laboratories.

 Dr. Charly Coulon – Head of Future Manufacturing Concepts, INVITE GmbH Collaboration – chair Dr. Tom Maes
Driving Sustainability
how to collaborate?

- Value of Industry-Academia Collaboration Frank Roschanger – Highly distinguished Research Fellow Development Sciences, Boehringer Ingelheim
- How to manage the collaboration lifecycle for sustainability?
   Laura Street, Research Manager, the SustainAbility Institute by ERM

14:30-15:30

Drug delivery – chair Dr. Werner Hoheisel New Modalities & Targeted Delivery: prospects for future application?

- Oral delivery of macromolecules Kelly Vandera, PhD,
   F. Hoffmann-La Roche AG
- Stimuli-sensitive & Intracellular drug delivery: why and how?
   Vladimir Torchilin, PhD, DSc University Distinguished Professor
   Director, Center for Pharmaceutical Biotechnology & Nanomedicine, Northeastern Univ, Boston (MA)

Smart Automation – chair Dr. Charly Coulon
Smart automation for production and
laboratories: what is possible today and new
developments.

- Benefits of modular automation in industry and why it is so hard to implement Henry Bloch – Managing Director, Semodia GmbH
- Biologics formulation development a prototype for end-to-end automation Dr. Jonas Angstenberger – Principal Research Scientist - Lab Head Automated HT Formulation Screening & Data Science, AbbVie

Collaboration – chair Dr. Tom Maes

Proven collaboration models between
companies and academia

- Toolbox and strategies to accelerate innovation and product development in public research institutes/universities: the CBGP (UPM-INIA/CSIC) experience Prof. Dr. Antonio Molina, Director, Centro de Biotecnología y Genómica de Plantas (CBGP, UPM-INIA/CSIC)
- How Alliances can create value
   Thomas Görgen VP, Head of Global
   Alliance Management, Covestro
   Deutschland AG

15:30-16:00

Break

16:00-16:45

**Key Note – Introduction** Dr. Markus Weigandt – Merck Healthcare KGaA, Head Pharmaceutical Technologies **Collaboration – a Key element for Scientific Research Productivity** Rob Harbron – Oxford Economics

16:45-17:00

**Close out & networking** Dr. Ildikó Terebesi – INVITE GmbH, Managing Director